

TENNESSEE AIR POLLUTION CONTROL BOARD
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
NASHVILLE, TENNESSEE 37243-1531



**SIGNIFICANT MODIFICATION #1 TO
OPERATING PERMIT (TITLE V) Issued Pursuant to Tennessee Air Quality Act**

This permit fulfills the requirements of Title V of the Federal Clean Air Act (42 U.S.C. 7661a-7661e) and the federal regulations promulgated thereunder at 40 CFR Part 70. (FR Vol. 57, No. 140, Tuesday, July 21, 1992 p.32295-32312). This permit is issued in accordance with the provisions of paragraph 1200-3-9-.02(11) of the Tennessee Air Pollution Control Regulations. The permittee has been granted permission to operate an air contaminant source in accordance with emissions limitations and monitoring requirements set forth herein.

Date Issued: **November 14, 2003**

Permit Number: **548412**

Date of Significant Modification #1: **XXX, 2005**

Date Expires: **November 14, 2008**

Issued To:
**Eastman Chemical Company
Tennessee Operations
P.O. Box 511
Kingsport, TN 37662**

Installation Address:
**South Eastman Road
Kingsport**

Installation Description: **MSOP-25 Chemical Manufacturing**

For Source Listing See Section E of Table of Contents

Significant Modification #1 Affects:

PES OC-BATCH

Production of Specialty Organic Chemicals

82-1011-12

Emission Source Reference No.: **82-0003 MSOP-25**

Renewal Application Due Date: **Between February 18, 2008 and May 18, 2008**

Primary SIC: 28

Responsible Official:
Name: Randall Conaway
Title: Division Superintendent

Facility Contact Person:
Name: Shawn Kerrick
Title: Environmental
Representative
Phone: (423) 229-3941

Information Relied Upon:

**Application revisions dated March 7, 2003 and
Minor Modification #1 application dated April 23, 2004 and
Significant Modification #1 application dated May 10, 2005
Minor Modification #2 application dated October 10, 2005**

(continued on the next page)

DRAFT
TECHNICAL SECRETARY

No Authority is Granted by this Permit to Operate, Construct, or Maintain any Installation in Violation of any Law, Statute, Code, Ordinance, Rule, or Regulation of the State of Tennessee or any of its Political Subdivisions.

POST OR FILE AT INSTALLATION ADDRESS

CONTENTS

SECTION E

**SOURCE SPECIFIC EMISSION STANDARDS, OPERATING LIMITATIONS, and
MONITORING, RECORDKEEPING and REPORTING REQUIREMENTS**

E1. Fee payment: allowable emissions basis	1
E2. General Facility Conditions	3
E2-1. Reporting requirements	
(a) Semiannual reports	3
(b) Annual compliance certification	3
E2-2. Conservation Vent Maintenance	4
E2-3. Internal Combustion Engines	4
E2-4. Determination of Non-applicability of NSPS	5
E2-5. Recordkeeping: Data Entry Requirements	5
E3-1. Production of Specialty Organic Chemicals (PES OC-BATCH). Conditions E3-1 through E3-13 apply.	6

Conditions with “SPM” suffix indicate a Significant Permit Modification
Conditions with “MPM” suffix indicate a Minor Permit Modification

END OF SIGNIFICANT MODIFICATION #1 TO PERMIT NUMBER 548412	13
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ATTACHMENT 2 Applicability Determinations for 40 CFR 60 (NSPS) and 40 CFR 63 (MACT) to MSOP-25

3 pages

SECTION E

SOURCE SPECIFIC EMISSION STANDARDS, OPERATING LIMITATIONS, and
MONITORING, RECORDKEEPING and REPORTING REQUIREMENTS

82-0003 MSOP-25	Facility Description:	Eastman Chemical Company - Tennessee Eastman Division facility in Kingsport manufactures chemicals, fibers, and plastics. The production of organic chemicals in the Chemicals Manufacturing Division is identified as MSOP-25 for Title V permitting purposes.
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Conditions E1 through E2 apply to all sources in Section E of this permit unless otherwise noted.

E1. SPM-1 Fee payment: mixture of allowable and actual emissions basis.

FEE EMISSIONS SUMMARY TABLE FOR MAJOR SOURCE **82-0003 MSOP-25**

REGULATED POLLUTANTS	ALLOWABLE EMISSIONS (tons per AAP)	ACTUAL EMISSIONS (tons per AAP)	COMMENTS
PARTICULATE MATTER (PM)	4.92	N/A	Includes family of particulate HAPs with a standard.
PM ₁₀	N/A	N/A	N/A
SO ₂	7.16	N/A	N/A
VOC	1457.08	N/A	Includes family of gaseous HAPs with a standard.
NO _x	15.0 MPM-1, was 10.41	N/A	N/A
CATEGORY OF MISCELLANEOUS HAZARDOUS AIR POLLUTANTS (HAP WITHOUT A STANDARD)*			
VOC FAMILY GROUP	N/A	N/A, SPM-1, was AEAR	N/A
NON-VOC GASEOUS GROUP	N/A, SPM-1, was 0.91	N/A, SPM-1, was AEAR	N/A
PM FAMILY GROUP	N/A	N/A, SPM-1, was AEAR	N/A
CATEGORY OF SPECIFIC HAZARDOUS AIR POLLUTANTS (HAP WITH A STANDARD)**			
VOC FAMILY GROUP	N/A	AEAR, SPM-1, was N/A	MACT 40 CFR 63 Subpart FFFF. Fee emissions are included in VOC above. See notes below.
NON-VOC GASEOUS GROUP Fluorides and Hydrochloric acid	0.91, SPM-1, was N/A	AEAR, SPM-1, was N/A	MACT 40 CFR 63 Subpart FFFF. Fee emissions are not included above. Maximum actual HAP emissions for PES B-267Y-9 and B-267TF. See notes below.
PM FAMILY GROUP	N/A	AEAR, SPM-1, was N/A	MACT 40 CFR 63 Subpart FFFF. Fee emissions are included in PM above. See notes below.
CATEGORY OF NSPS POLLUTANTS NOT LISTED ABOVE***			
EACH NSPS POLLUTANT NOT LISTED ABOVE	N/A	N/A	N/A

NOTES

AAP The **Annual Accounting Period (AAP)** is a twelve (12) consecutive month period that **begins each July 1st and ends June 30th of the following year**. The **present Annual Accounting Period began July 1, 2003 and ends June 30, 2004**. The **next Annual Accounting Period begins July 1, 2004 and ends June 30, 2005**.

N/A N/A indicates that no emissions are specified for fee computation.

AEAR **AEAR** indicates that an **Actual Emissions Analysis** is **Required** to determine the actual emissions of:

- (1) **each regulated pollutant** (Particulate matter, SO₂, VOC, NO_x and so forth. See TAPCR 1200-3-26-.02(2)(i) for the definition of a regulated pollutant.),
- (2) **each pollutant group** (VOC Family, Non-VOC Gaseous, and Particulate Family), and
- (3) **the Miscellaneous HAP Category**

under consideration during the **Annual Accounting Period**.

AEAR for HAPs: for VOC-HAP and PM-HAP family groups for sources OC-BATCH, B-267-SR, B-267-25, B-267Y-1, B-267Y-2, B-267Y-3, B-267Y-4, B-267Y-6, and B-267Y-7. **AEAR** for source OC-BATCH to include Non-VOC family group (fluorides and hydrochloric acid).

***** **Category Of Miscellaneous HAP (HAP Without A Standard):** This category is made-up of hazardous air pollutants that do not have a federal or state standard. Each HAP is classified into one of three groups, the **VOC Family** group, the **Non-VOC Gaseous** group, or the **Particulate (PM) Family** group. **For fee computation**, the **Miscellaneous HAP Category** is subject to the 4,000 ton cap provisions of subparagraph 1200-3-26-.02(2)(i).

****** **Category Of Specific HAP (HAP With A Standard):** This category is made-up of hazardous air pollutants (HAP) that are subject to Federally promulgated Hazardous Air Pollutant Standards that can be imposed under Chapter 1200-3-11 or Chapter 1200-3-31. Each individual hazardous air pollutant is classified into one of three groups, the **VOC Family** group, the **Non-VOC Gaseous** group, or the **Particulate (PM) Family** group. **For fee computation**, each individual hazardous air pollutant of the **Specific HAP Category** is subject to the 4,000 ton cap provisions of subparagraph 1200-3-26-.02(2)(i).

******* **Category Of NSPS Pollutants Not Listed Above:** This category is made-up of each New Source Performance Standard (NSPS) pollutant whose emissions are not included in the **PM, SO₂, VOC or NO_x** emissions from each source in this permit. **For fee computation**, each **NSPS pollutant not listed above** is subject to the 4,000 ton cap provisions of subparagraph 1200-3-26-.02(2)(i).

END NOTES

The permittee shall:

- (1) Pay annual **allowable based emission fees** for the **present Annual Accounting Period**.
- (2) Pay major source annual **mixture (allowable and actual) based emission fees**, as requested by the responsible official, beginning July 1, **2004** of the **next annual accounting period**.
- (3) Prepare an **actual emissions and allowable emissions analysis** beginning July 1, **2004** in accordance with the above **Fee Emissions Summary Table**. The **actual emissions and allowable emissions analysis** shall include:
 - (a) the completed **Fee Emissions Summary Table**,
 - (b) each **AEAR** required by the above **Fee Emissions Summary Table**.
- (4) Submit the **actual emissions and allowable emissions analysis** at the time the fees are paid in full.
- (5) Calculate the fee due based upon the **actual emissions and allowable emissions analysis**, and submit the payment on July 1st following the end of the **annual accounting period**. If any part of any fee imposed under TAPCR 1200-3-26-.02 is not paid within fifteen (15) days of the due date, penalties shall at once accrue as specified in TAPCR 1200-3-26-.02(8). Major sources may request an extension of time to file their emissions analysis with the Technical Secretary as specified in Condition A8(c)5 of this permit. Emissions for regulated pollutants shall not be double counted as specified in Condition A8(d) of this permit.

Payment of the fee due and the actual emissions and allowable emissions analysis shall be submitted to The Technical Secretary at the address in Condition E2-1(b) of this permit.

TAPCR 1200-3-26-.02 (3) and (9), and 1200-3-9-.02(11)(e)1 (iii) and (vii)

E2. General Facility Requirements

E2-1. SPM-1/ MPM-2 Reporting requirements.

SPM-1 and MPM-2 revise condition E2-1 (a) - semiannual reports. Condition E2-1 (b) for the annual compliance certification of permit 548412 is not affected. Also, SPM-1 adds condition E2-5.

(a) **Semiannual reports.** The first report shall cover the 6-month period from July 1, 2004 to December 31, 2004 and shall be submitted within 60 days after the 6-month period ending December 31, 2004. Subsequent reports shall be submitted within 60 days after the end of each 6-month period following the first report. If the magnitude and frequency of excursions reported by the permittee in the periodic monitoring for emissions is unsatisfactory to the Technical Secretary, this permit may be reopened to impose additional opacity monitoring requirements.

Semiannual reports of this facility (**82-0003 MSOP-25**) shall include:

- (1) Any monitoring and recordkeeping required by Conditions **E3-2 (SPM-1), E3-3, E3-4 (SPM-1), E3-5, E3-8 (SPM-1/ MPM-2), E3-9 (SPM-1/ MPM-2), E3-10, E3-13 (SPM-1), E4-1, E4-2, E5-1, E5-2, E5-3, E5-4, E5-6, E5-7, E5-8, E7-1, E7-2, E8-1, E8-2, E9-1, E9-2, E10-1, E10-2, E11-2, E12-2, E13-2, E14-1, E14-2, E15-2, E16-1, E16-2, E17-1, and E17-2** of this permit. However, a summary report of this data is acceptable provided there is sufficient information to enable the Technical Secretary to evaluate compliance.
- (2) Any applicable semiannual reports otherwise required by 40 CFR Part 60 (Standards of Performance for New Stationary Sources) or 40 CFR Part 63 (National Emission Standards for Hazardous Air Pollutants for Source Categories) for which the reporting period begins but does not end during the period from issuance of this permit on November 14, 2003 until July 1, 2004, may be submitted as a part of the first semiannual report required by Condition E2-1(a) of this permit which follows the end of the applicable reporting period. The subsequent semiannual reporting periods may coincide with the semiannual reporting periods required by condition E2-1(a) of this permit. However, a summary report of this data is acceptable provided there is sufficient information to enable the Technical Secretary to evaluate compliance.
- (3) The visible emission evaluation readings from Conditions **E3-11, E4-1, E5-9, E6-1, E7-3, E8-3, E9-3, E10-3, E11-3, E12-3, E13-3, E14-3, E15-3, E16-6, and E17-9** of this permit if required. However, a summary report of this data is acceptable provided there is sufficient information to enable the Technical Secretary to evaluate compliance.
- (4) Identification of all instances of deviations from **ALL PERMIT REQUIREMENTS**.

These reports must be certified by a responsible official consistent with condition B4 of this permit and shall be submitted to The Technical Secretary at the address in Condition E2-1(b) of this permit.

TAPCR 1200-3-9-.02(11)(e)1.(iii)

(b) **Annual compliance certification.** The permittee shall submit annually compliance certifications with terms and conditions contained in Sections A, B, D and E of this permit, including emission limitations, standards, or work practices. This compliance certification shall include all of the following (provided that the identification of applicable information may cross-reference the permit or previous reports, as applicable):

- (1) The identification of each term or condition of the permit that is the basis of the certification;
- (2) The identification of the method(s) or other means used by the owner or operator for determining the compliance status with each term and condition during the certification period;
- (3) Whether such method(s) or other means provide continuous or intermittent data. Such methods and other means shall include, at a minimum, the methods and means required by this permit. If necessary, the owner or operator also shall identify any other material information that must be included in the

certification to comply with section 113(c)(2) of the Federal Act, which prohibits knowingly making a false certification or omitting material information;

- (4) The status of compliance with the terms and conditions of the permit for the period covered by the certification, based on the method or means designated in E2-1(b)2 above. The certification shall identify each deviation and take it into account in the compliance certification. The certification shall also identify as possible exceptions to compliance any periods during which compliance is required and in which an *excursion or **exceedance as defined below occurred; and
- (5) Such other facts as the Technical Secretary may require to determine the compliance status of the source. ***"Excursion" shall mean a departure from an indicator range established for monitoring under this paragraph, consistent with any averaging period specified for averaging the results of the monitoring. ***"Exceedance" shall mean a condition that is detected by monitoring that provides data in terms of an emission limitation or standard and that indicates that emissions (or opacity) are greater than the applicable emission limitation or standard (or less than the applicable standard in the case of a percent reduction requirement) consistent with any averaging period specified for averaging the results of the monitoring.

The first submittal shall cover the 12-month period from July 1, 2004 to June 30, 2005 and shall be submitted within 60 days after the 12-month period ending June 30, 2005. Subsequent certifications shall be submitted within 60 days after the end of each 12-month period following the first certification:

These certifications shall be submitted to: Tennessee Division of Air Pollution Control TN APCD and EPA

**The Technical Secretary
Division of Air Pollution Control
ATTN: East Tennessee Permit Program
9th Floor, L & C Annex
401 Church Street
Nashville, Tennessee 37243-1531**

and

**Air and EPCRA Enforcement Branch
US EPA Region IV
61 Forsyth Street, SW
Atlanta, Georgia 30303**

40 CFR Part 70.6(c)(5)(iii) as amended in the Federal Register Vol.62, No.204, October 22, 1997, pages 54946 and 54947

In addition, the facility shall submit to the Technical Secretary by January 31 of each year the compliance certification required by TAPCR paragraph 1200-3-32-.03(3) (adherence to the submitted accidental release plan for facilities subject to Section 112(r) of the federal Clean Air Act).

E2-2. Conservation Vent Maintenance:

For storage or process vessels subject to emission limitations based upon TAPCR 1200-3-7-.07(2):

Where removal of a pressure relief device such as a conservation vent from a storage or process vessel would otherwise result in excess emissions, the owner or operator is permitted to remove the pressure relief device provided the following applicable conditions are met:

For vessels which under normal operating conditions vent to a downstream piece of process or control equipment, a pressure relief device may be removed for up to a 5 day period of time for maintenance, replacement, calibration, or inspection, under the following conditions:

- (a) Upward level movement of liquid within the vessel is restricted to ten percent of the vessel height during the period in which the pressure relief device is removed, or
- (b) Emissions of air contaminants due to working losses and inert gas purge losses are restricted to 100 pounds per day as determined by standard engineering estimation methods during the period in which the pressure relief device is removed.

Emissions occurring during the period of time the pressure relief device is removed shall not be considered excess emissions.

E2-3. Internal Combustion Engines

Internal combustion engines burning natural gas, gasoline, or diesel fuel including stationary reciprocating engines, internal combustion (IC) engine driven compressors, and IC driven water pumps shall qualify as insignificant emissions units under 1200-3-9-.04(5)(a)4.(i) as long as the owner or operator maintains records of fuel usage or operating hours that demonstrate

the emission thresholds included in 1200-3-9-.04(5)(a)4.(i) are met on an annual basis for each engine. The owner or operator shall utilize the emission factors found in the EPA document AP-42, Fifth Edition, Volume I, Section 3.3 Gasoline and Diesel Industrial Engines or some other alternative means approved by the Technical Secretary when making this demonstration. This permit condition does not apply to equipment used exclusively for emergency replacement or standby service.

E2-4. Determination of Non-applicability of NSPS

The permittee requested in the March 7, 2003 permit application that the Technical Secretary determine that the provisions of NSPS Subparts VV* of 40 CFR 60.480(a)(1) and NNN** of 40 CFR 60.660(a) do not apply to source 82-1004-33 (PES B-267Y-7 – Unit 96 Solvent Recovery Columns, Receivers, and Condensers). The source operations separate the components of solvent mixtures, that are composed of purchased solvents and impurities from non-listed chemical processes, for reuse in processes that produce non-listed chemicals, i.e., chemicals not listed in 40 CFR 60.481 or 60.667. None of the separated components of the mixtures are chemically changed in the solvent recovery operations; therefore, no listed chemicals are produced. Based upon this information, the Technical Secretary has determined that the NSPS provisions of Subparts VV and NNN are not applicable to source 82-1004-33 (PES B-267Y-7). This non-applicability determination is per the provisions of TAPCR Rule 1200-3-9-.02(11)(e)6(i)(II).

* Standards of Performance for equipment leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry.

** Standards of Performance for VOC Emissions from the Synthetic Organic Chemicals Manufacturing Industry Distillation Operations.

E2-5. SPM-1 Recordkeeping: Data Entry Requirements

a) For monthly recordkeeping, all data, including results of all calculations, must be entered into the log no later than 30 days from the end of the month for which the data is required.

b) For weekly recordkeeping, all data, including results of all calculations, must be entered into the log no later than 14 days from the end of the week for which the data is required.

c) For daily recordkeeping, all data, including results of all calculations, must be entered into the log no later than 14 days from the end of the day for which the data is required.

Specialty Organic Chemicals Manufacturing Process (82-1011-12)

Emission Source Specific Operating Permit Conditions*

Conditions E3-1 through E3-13 Apply to Source

1. EASTMAN SOURCE NUMBER PES OC-BATCH		2. EMISSION SOURCE DESCRIPTION Specialty Organic Chemicals Manufacturing Process		3. EMISSION SOURCE REFERENCE NUMBER 82-1011-12		4. MSOP NUMBER MSOP-25		5. PERMIT NUMBER 548412	
6. ID	7. PORTION OF SOURCE SUBJECT TO REQUIREMENT	8. POLLUTANT	9. UNDERLYING APPLICABLE REQUIREMENT(S)	10. LIMITATION OR STANDARD	11. REFERENCE TEST METHOD	12. PERIODIC MONITORING METHOD(S)			
FEDERALLY AND STATE ENFORCEABLE CONDITIONS									
E3-1 SPM-1*** /MPM-2	Entire Source See Item 10	N/A Source Description	TAPCR 1200-3-9: Permit Number 949315P, Condition 2. (modified in Permit Number 956476P).	See Source Description Table – page 20 (see page 7 of SPM-1)	N/A	N/A			
E3-2 SPM-1***	Entire Source, excluding fugitive equipment leaks from pumps, valves, flanges, etc.	VOC and Other Organics	TAPCR 1200-3-7-.07(2): Permit Number 949315P, Condition 4. (modified in Permit Number 956476P).	915.3 tons during any period of 12 consecutive months	Engineering Assessment	Parametric Monitoring: 1. Daily inspection of air pollution control and recovery devices to ensure proper operation. See Operating Plan in the Title V Application for PES OC-BATCH, page 23, dated 3/7/03 and pages 24 and 25, dated 4/23/04. 2. Monthly emissions, calculated using an emission factor for each product, recorded in a log as both a 12-month rolling total and as a monthly value. See Operating Plan in the Title V Application for PES OC-BATCH, page 29, dated 3/7/03.			

*** SPM-1 corrects conditions E3-1 and E3-2

* See Table Notes for additional clarification of permit conditions.

Specialty Organic Chemicals Manufacturing Process (82-1011-12)

Emission Source Specific Operating Permit Conditions*

Conditions E3-1 through E3-13 Apply to Source

MSOP 25**PES OC-BATCH**

Permit Condition E3-1 SPM-1/ MPM-2, Item 10

Process Emission Source Description Table

Emission Unit	PES Number	ESR Number	Number of Stacks	Control / Recovery Devices
Miscellaneous Batch Production Equipment	B-13	82-1010-65	26	Nine Wet Scrubbers & Ten Condensers
Miscellaneous Batch Production Equipment	B-246	82-1004-04	18	Eight Wet Scrubbers
Batch Production Equipment, Dryers, Mix Tank and Autoclaves, Solvent Stripping	B-267	82-1003-15	16	Ten Wet Scrubbers & Twenty-nine Condensers
Batch Production Equipment, Dryers, Solvent Stripping	B-267A	82-1004-05	10	Eight Wet Scrubbers, Two Dust Collectors & Nineteen Condensers
Batch Production Equipment, Mix Tank and Autoclave, Solvent Stripping****	B-267D	82-1003-01	2	One Condenser & One Wet Scrubber

**** Added by MPM-2

* See Table Notes for additional clarification of permit conditions.

Specialty Organic Chemicals Manufacturing Process (82-1011-12)

Emission Source Specific Operating Permit Conditions*

Conditions E3-1 through E3-13 Apply to Source

1. EASTMAN SOURCE NUMBER		2. EMISSION SOURCE DESCRIPTION		3. EMISSION SOURCE REFERENCE NUMBER		4. MSOP NUMBER		5. PERMIT NUMBER	
PES OC-BATCH		Specialty Organic Chemicals Manufacturing Process		82-1011-12		MSOP-25		548412	
6. ID	7. PORTION OF SOURCE SUBJECT TO REQUIREMENT	8. POLLUTANT	9. UNDERLYING APPLICABLE REQUIREMENT(S)	10. LIMITATION OR STANDARD	11. REFERENCE TEST METHOD	12. PERIODIC MONITORING METHOD(S)			
FEDERALLY AND STATE ENFORCEABLE CONDITIONS									
E3-3	Flow Diagram Point D (Equipment Leaks)	VOC and Other Organics, Nitrogen Oxides, and Carbon Monoxide	TAPCR 1200-3-7-.07(2)	Quarterly Leak Inspection and Repair (Fugitive emissions from pumps, valves, flanges, etc. are estimated at 116.65 ton/yr for VOC and Other Organics, 1.0 ton/yr for Nitrogen Oxides, and 8.0 ton/yr for Carbon Monoxide)	See Item 10	See Item 10			
E3-4 SPM-1***	Entire Source, excluding fugitive equipment leaks from pumps, valves, flanges, etc.	Nitrogen Oxides	TAPCR 1200-3-7-.07(2): Permit Number 949315P, Condition 5. (modified in Permit Number 956476P).	14.0 tons during any period of 12 consecutive months	Engineering Assessment	Parametric Monitoring: 1. Daily inspection of air pollution control devices to ensure proper operation. See Operating Plan in the Title V Application for PES OC-BATCH, page 23, dated 3/7/03 and pages 24 and 25, dated 4/23/04. 2. Monthly emissions, calculated using an emission factor for each product, recorded in a log as both a 12-month rolling total and as a monthly value. See Operating Plan in the Title V Application for PES OC-BATCH, page 28, dated 4/23/04.			

*** SPM-1 corrects condition E3-4.

* See Table Notes for additional clarification of permit conditions.

Specialty Organic Chemicals Manufacturing Process (82-1011-12)

Emission Source Specific Operating Permit Conditions*

Conditions E3-1 through E3-13 Apply to Source

1. EASTMAN SOURCE NUMBER PES OC-BATCH		2. EMISSION SOURCE DESCRIPTION Specialty Organic Chemicals Manufacturing Process		3. EMISSION SOURCE REFERENCE NUMBER 82-1011-12	4. MSOP NUMBER MSOP-25	5. PERMIT NUMBER 548412
6. ID	7. PORTION OF SOURCE SUBJECT TO REQUIREMENT	8. POLLUTANT	9. UNDERLYING APPLICABLE REQUIREMENT(S)	10. LIMITATION OR STANDARD	11. REFERENCE TEST METHOD	12. PERIODIC MONITORING METHOD(S)
FEDERALLY AND STATE ENFORCEABLE CONDITIONS						
E3-5	Entire Source, excluding fugitive equipment leaks from pumps, valves, flanges, etc.	Carbon Monoxide	TAPCR 1200-3-7-.07(2): Permit Number 949315P, Condition 6. (modified in Permit Number 956476P).	71.54 tons during any period of 12 consecutive months	Engineering Assessment	Parametric Monitoring: Monthly emissions, calculated using an emission factor for each product, recorded in a log as both a 12-month rolling total and as a monthly value. See Operating Plan in the Title V Application for PES OC-BATCH, page 27, dated 3/7/03.
E3-6	See State-Only Enforceable Conditions below.					
E3-7	See State-Only Enforceable Conditions below.					
E3-8 SPM-1 ***/ MPM-2	Entire Source See Item 10	Particulates	TAPCR 1200-3-7-.01(5): Permit Number 949315P, Condition 9. (modified in Permit Number 956476P). Agreement letters dated April 15, 1986 and July 1, 1998.	See Emissions Limits Table – page 24 (see page 12 of SPM-1)	EPA Method 5 for lb/hr limits and Engineering Assessment for ton/yr limits	Parametric Monitoring: Daily inspection of air pollution control devices to ensure proper operation. See Operating Plan in the Title V Application for PES OC-BATCH, page 23, dated 3/7/03 and pages 24 and 25, dated 4/23/04.

*** SPM-1 corrects condition E3-8.

* See Table Notes for additional clarification of permit conditions.

Specialty Organic Chemicals Manufacturing Process (82-1011-12)

Emission Source Specific Operating Permit Conditions*

Conditions E3-1 through E3-13 Apply to Source

1. EASTMAN SOURCE NUMBER		2. EMISSION SOURCE DESCRIPTION		3. EMISSION SOURCE REFERENCE NUMBER		4. MSOP NUMBER		5. PERMIT NUMBER	
PES OC-BATCH		Specialty Organic Chemicals Manufacturing Process		82-1011-12		MSOP-25		548412	
6. ID	7. PORTION OF SOURCE SUBJECT TO REQUIREMENT	8. POLLUTANT	9. UNDERLYING APPLICABLE REQUIREMENT(S)	10. LIMITATION OR STANDARD	11. REFERENCE TEST METHOD	12. PERIODIC MONITORING METHOD(S)			
FEDERALLY AND STATE ENFORCEABLE CONDITIONS									
E3-9 SPM-1 ***/ MPM-2	Entire Source See Item 10	Sulfur Dioxide	TAPCR 1200-3-14-.01(3): Permit Number 949315P, Condition 10. (modified in Permit Number 956476P). Agreement letter dated July 1, 1998.	See Emissions Limits Table – page 24 (see page 12 of SPM-1)	EPA Method 6, 6A, 6B, or 6C for lb/hr limits and Engineering Assessment for ton/yr limits	Parametric Monitoring: 1. Daily, when sulfur dioxide emissions are occurring, of a continuous pH and scrubber medium recirculation flow rate. See Operating Plan in the Title V Application for PES OC-BATCH, page 21, dated 3/7/03. 2. Daily inspection of air pollution control devices to ensure proper operation. See Operating Plan in the Title V Application for PES OC-BATCH, page 23, dated 3/7/03 and pages 24 and 25, dated 4/23/04. 3. Monthly emissions, calculated using an emission factor for each product, recorded in a log as both a 12-month rolling total and as a monthly value. See Operating Plan in the Title V Application for PES OC-BATCH, page 26, dated 3/7/03.			
E3-10	Entire Source, excluding fugitive equipment leaks from pumps, valves, flanges, etc.	Sulfur Dioxide	TAPCR 1200-3-14-.03(2)	1000 ppmv, dry basis (one hour average)	EPA Method 6, 6A, 6B, or 6C	Monitoring required by ID Limitation E3-9 will ensure compliance with this limit.			
E3-11	Entire Source	Visible Emissions	TAPCR 1200-3-5: Permit Number 949315P, Condition 13.	20% Opacity	EPA Method 9	Visible Emissions Evaluation: Emission units requiring initial VEEs – None, per TAPCD Opacity Matrix dated 6/18/96.			
E3-12	See State-Only Enforceable Conditions below								

* See Table Notes for additional clarification of permit conditions.

Attachment Date: XXXX, 2000

1. EASTMAN SOURCE NUMBER PES OC-BATCH		2. EMISSION SOURCE DESCRIPTION Specialty Organic Chemicals Manufacturing Process		3. EMISSION SOURCE REFERENCE NUMBER 82-1011-12		4. MSOP NUMBER MSOP-25		5. PERMIT NUMBER 548412	
6. ID	7. PORTION OF SOURCE SUBJECT TO REQUIREMENT	8. POLLUTANT	9. UNDERLYING APPLICABLE REQUIREMENT(S)	10. LIMITATION OR STANDARD	11. REFERENCE TEST METHOD	12. PERIODIC MONITORING METHOD(S)			
FEDERALLY AND STATE ENFORCEABLE CONDITIONS									
E3-13 SPM-1 ***	Miscellaneous Organic Manufacturing Chemical Process Unit (General Purpose Batch Manufacturing)	HAPS	National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing (40 CFR Part 63, Subpart FFFF) Final rule promulgated on November 10, 2003 (68 <u>Federal Register</u> 63852) A listing of specific applicability determinations for 40 CFR Parts 60 and 63 in effect as of the submittal date of this permit application is Attachment 2. Changes that result in a change of applicability are Section 502(b)(10) changes and require notice under Permit Condition C2. This notice shall include an update to Attachment 2 and shall be attached to this permit.						

*** SPM-1 corrects condition E3-9 and adds condition E3-13.

Specialty Organic Chemicals Manufacturing Process (82-1011-12)

Emission Source Specific Operating Permit Conditions*

Conditions E3-1 through E3-13 Apply to Source

MSOP 25**PES OC-BATCH**

Permit Conditions E3-8 SPM-1/ MPM-2 and E3-9 SPM-1/ MPM-2, Item 10

Particulate Matter (PM) and Sulfur Dioxide (SO₂) Emission Limits Table

ID	Emission Unit	PES Attachment and Vent I.D.	PM in pounds per hour	PM in tons during time T*	SO ₂ in pounds per hour	SO ₂ in tons during time T*
a	Cyclic Intermediates & Dye Cakes Equipment	B-13, Vent L	0.10	0.41	NA	NA
b	Cyclic Intermediates & Dye Cakes Equipment	B-13, Vent M	0.09	0.41	NA	NA
c	Cyclic Intermediates & Dye Cakes Equipment	B-13, Vent P	0.02	0.09	NA	NA
d	Cyclic Intermediates & Dye Cakes Equipment	B-13, Vent Q	neg**	0.02	NA	NA
e	Cyclic Intermediates & Dye Cakes Equipment	B-13, Vent N	neg**	neg**	NA	NA
f	Cyclic Intermediates & Dye Cakes Equipment	B-13, Vent F	0.01	0.04	neg**	neg**
g	Cyclic Intermediates & Dye Cakes Equipment	B-13, Vents A-E, G, H, J, K, O, S-W, Y, Z	0.01	neg**	NA	NA
h	Miscellaneous Batch Production Equipment	B-13, Vents R, I	NA	NA	0.05	0.11
i	Miscellaneous Batch Production Equipment	B-246, Vents A-G, I, J	0.05	0.20	NA	NA
j	Miscellaneous Batch Production Equipment	B-246, Vents H, M-S	0.05	0.20	NA	NA
k	Cyclic Intermediates Production	B-246, Vent K	NA	NA	NA	NA
l	Batch Production Equipment	B-267, Vents A-G, I	0.06	0.28	2.0	1.57
m	Dryers	B-267, Vents K, L	0.06	0.26	NA	NA
n	Mix Tank and Autoclaves	B-267, Vents M-Q B-267D, Vents B, C ****	NA	NA	NA	NA
o	Solvent Stripping	B-267, Vent R	NA	NA	NA	NA
p	Batch Production Equipment	B-267A, Vents A-G, I	0.05	0.20	2.0	2.74
q	Dryers	B-267A, Vent K	0.10	0.44	NA	NA
r	Batch Production Equipment	B-267A, Vent L	0.01	0.04	2.0	2.74
s	Solvent Stripping	B-267A, Vent H	NA	NA	NA	NA
	TOTAL	NA	0.61	2.59	6.05	7.16

* Time T is any period of 12 consecutive months

NA = not applicable

neg** = negligible

**** Added by MPM-2

* See Table Notes for additional clarification of permit conditions.

Specialty Organic Chemicals Manufacturing Process (82-1011-12)

Emission Source Specific Operating Permit Conditions*

Conditions E3-1 through E3-13 Apply to Source

1. EASTMAN SOURCE NUMBER PES OC-BATCH		2. EMISSION SOURCE DESCRIPTION Specialty Organic Chemicals Manufacturing Process		3. EMISSION SOURCE REFERENCE NUMBER 82-1011-12	4. MSOP NUMBER MSOP-25	5. PERMIT NUMBER 548412
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STATE-ONLY ENFORCEABLE CONDITIONS						
E3-6	Entire Source, excluding fugitive equipment leaks from pumps, valves, flanges, etc.	Other – Ammonia	TAPCR 1200-3-7-.07(2): Permit Number 949315P, Condition 7. (modified in Permit Number 956476P).	22.4 tons during any period of 12 consecutive months.	Engineering Assessment	Not Applicable**
E3-7	Entire Source, excluding fugitive equipment leaks from pumps, valves, flanges, etc.	Other – Halogens and Halides	TAPCR 1200-3-7-.07(2): Permit Number 949315P, Condition 8. (modified in Permit Number 956476P).	3.5 tons during any period of 12 consecutive months.	Engineering Assessment	Not Applicable**
E3-12	Flow Diagram Point D (Equipment Leaks)	Other – Ammonia and Halogens and Halides	TAPCR 1200-3-7-.07(2)	Quarterly Leak Inspection and Repair (Fugitive emissions from pumps, valves, flanges, etc. are estimated at 2.3 ton/yr for Ammonia and 0.4 ton/yr for Halogens and Halides)	See Item 10	Not Applicable**
With the exception of the requirements in Conditions E1 SPM-1, E2-1 SPM-1/ MPM-2, E2-5 SPM-1, E3-1 SPM-1/ MPM-2, E3-2 SPM-1, E3-4 SPM-1, E3-8 SPM-1/ MPM-2, E3-9 SPM-1/ MPM-2, and E3-13-SPM-1, E5-5-MPM-1, E17-6-MPM-1, and E17-7-MPM-1, and above, the permittee shall comply with all the terms and conditions of the Title V permit #548412 dated November 14, 2003 for this source.						

** “Not Applicable” because the term or condition does not implement relevant requirements of the Federal Act and therefore is not an applicable requirement under the Federal Act.

END of SIGNIFICANT MODIFICATION #1 to PERMIT NUMBER 548412

* See Table Notes for additional clarification of permit conditions.

ATTACHMENT 2

SPECIFIC APPLICABILITY DETERMINATIONS
FOR 40 CFR 60 (NSPS) and 40 CFR 63 (MACT)
TO MSOP-25

Significant Modification #1 does not affect this page**NEW SOURCE PERFORMANCE STANDARDS****40 CFR Part 60****Specific Applicability Determinations****MAJOR SOURCE OPERATING PERMIT (MSOP)****MSOP 25****PES B-267A-3**

Identification	Category	Rule Citation
Subpart Kb – Storage Vessels		
N/A	Storage Vessels storing a VOL having a maximum true vapor pressure less than 76.7 kPa and must meet standards.	40 CFR 60.112b(a)
N/A	Storage Vessels storing a VOL having a maximum true vapor pressure equal to or greater than 76.7 kPa and must meet standards.	40 CFR 60.112b(b)
Tanks XA-C-99A6 and XA-C-99A1 (Vent E)	Storage Vessels that are not required to meet standards.	40 CFR 60.110b
Tanks XA-C-99A6 and XA-C-99A1 (Vent E)	Monitoring, recordkeeping, and reporting.	40 CFR 60.115b, 60.116b

**MON Requirements
40 CFR Part 63 Subpart FFFF
Specific Applicability Determinations**

**MAJOR SOURCE OPERATING PERMIT (MSOP)
MSOP-25
PES OC-Batch**

Significant Modification #1 adds this table.

Identification	Category	Rule Citation
Emissions Averaging¹		
Process Vents: Applicable Group 1 Batch Process Vents; applicable Group 2 Batch Process Vents Used to Generate Credits	Comply with the approved Emissions Averaging Plan ¹ .	40 CFR 63.2500
Storage Vessels: PES B-267TF, Vent M1(Tank 3019)		
Wastewater Streams: Applicable Group 1 Wastewater Streams		
Recordkeeping and Reporting		
MON, subject FFFF points as applicable	Recordkeeping and Reporting	40 CFR 63.2525; 40 CFR 63.2520

Footnotes:

1 See the MON Emissions Averaging Plan in Appendix A of the Title V Significant Modification application dated May 10, 2005.